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DISA Customer Conference TRACK SESSION

Global Command and Control System – Joint (GCCS-J)

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Topics

- GCCS-J Overview
- Status of and targeted releases
- Status of modernization efforts

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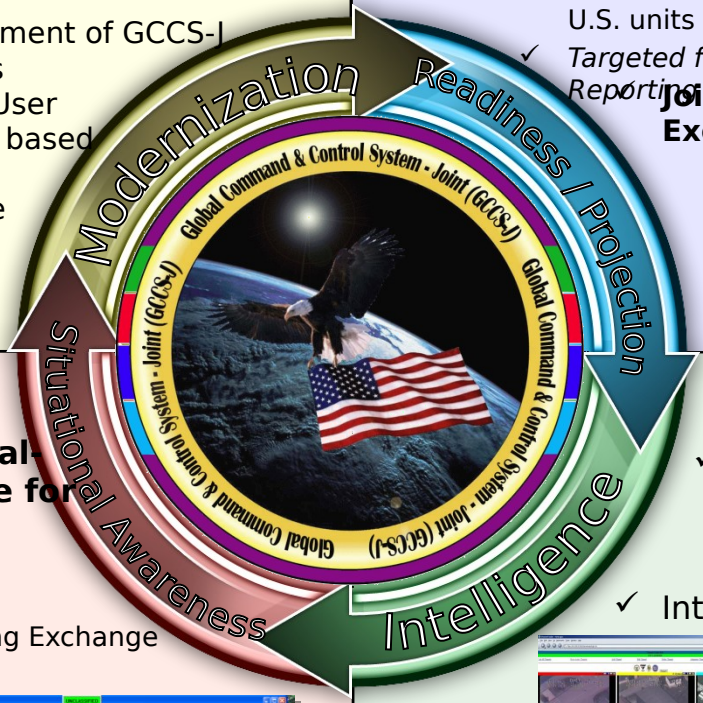
What is GCCS-J?

Modernization Activities

- ✓ **Migrate towards conformance with Joint C2 objective Architecture and DoD IEA**
- ✓ Modernization Initiatives:
  - ✓ Enterprise COP: Enterprise deployment of GCCS-J Situational Awareness components
  - ✓ Joint C2 Common User Interface: User configurable thin client framework based on Ozone Widgets
  - ✓ Cross Domain Services: Enterprise deployment of track, imagery, and intelligence CDS capabilities

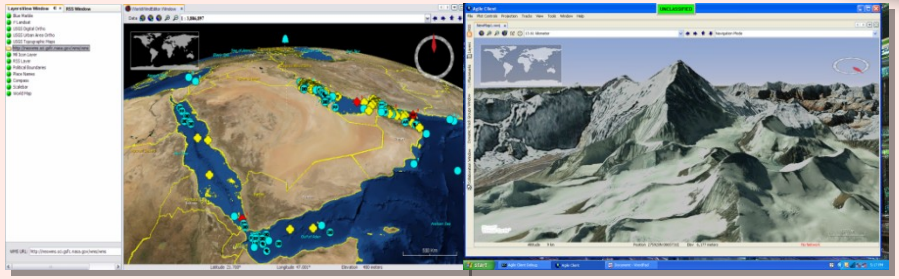


SORTS / JOPES Baselines

- ✓ **Status of Resources & Training System (SORTS)**
  - ✓ Provides authoritative information on the identification, location, resources, and readiness of U.S. units
  - ✓ *Targeted for replacement by Defense Readiness Reporting System (DRRS)*
- ✓ **Joint Operation Planning & Execution System (JOPES)**
  - ✓ Builds force modules
  - ✓ Provides force visibility
  - ✓ Reflects scheduling and movement
  - ✓ Produces reports
  - ✓ *Will be modernized as part of Joint Planning and Execution Services (JPES)*

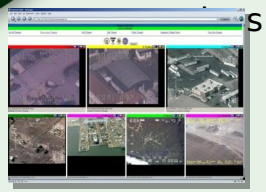
GLOBAL Baseline – SA

- ✓ **Presents an integrated near real-time picture of the battle space for executing military operations**
  - ✓ Red and Blue Force Picture
  - ✓ CBRN (JEM / JWARN)
  - ✓ Theater Missile Warning
  - ✓ Alerts
  - ✓ Air Tasking Exchange



GLOBAL Baseline – I3

- ✓ **Integrated Intelligence and Imagery (I3) provides intelligence support to the COP**
- ✓ Integrated suite of tools and
  - ✓ LIVE Predator UAV streaming
  - ✓ Simultaneous search capability
  - ✓ Imagery association to MIDB
  - ✓ Imagery plot to COP



- ✓ Analyst Workshop
- ✓ Still and motion imagery tools
- ✓ Joint Targeting Toolbox (JTT)
- ✓ Joint Threat Analysis Tool (JTAT)

Current GCCS-J Execution Responsibilities

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Sustainment

Operational Baselines
GLOBAL
JOPES
SORTS

Type of Support
IAVAs
ATOS
Help Desk
COTS licenses
Tech Refresh
Fielding
Critical Operational Fixes
Backwards compatibility

Modernization

CDS
JC2CUI
E COP
Agile Client
Client Consolidation
HW & SW Refresh

Evolving GCCS-J and modernizing key capability areas leveraging new technology and revamping processes

Synchronization

FoS
GCCS-A
GCCS-M
USMC
GCCS-AF

Using Global infrastructure with service applications on top

External Applications
Transviz
JTT
WAT
IMOM
JEM/JWARN
C2PC Gateway

Fielded as part of GCCS-J

GCCS-J Critical External Interfaces

DCAPES	DRRS-A	MIDB	GCCS-AF	GCCS-M
CAMPS	DRRS-N	NGA IPL	TBMCS	USCG
COMPASS	DRRS-AF	UAV GCS	GCCS-A	TCO
DRRS-A	DRRS-MC		DTRA	
JFAST			ETMS	
GTN			IBS-S	
GCSS			SBMCS	
SMS			ADSI	
Transviz			Link 11/16	
IGC/GTN			NBC	

Current SOR for Joint C2
ACAT IAC
MDA = DISA CAE
Ops Sponsor = J8/CCD
Principal advisor to the Chairman on C2 = JS J3
DAA = STRATCOM

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GCCS-J Myth Busters

Myth	GCCS-J Status
GCCS-J is a legacy, stove-piped, system using 20 year old technology	•Significant investments have been made to GCCS-J through technology refreshment and architecture migration. •Improvements include migration to an n-tier architecture, support for PKI-based authentication, an order of magnitude increase in track management capabilities, adoption of Joint C2 objective architecture technical standards, implementation of numerous web services, and inclusion of enterprise messaging and discovery services.
GCCS-J is made up of only point to point connections	•GCCS-J provides 110 web services across Global and JOPES baselines to include alerts, tracks, operational context, UAV, bomb damage assessment, and JOPES JDNETS. •The underlying components are designed to be used by current and unplanned consumers. •GCCS-J provisioned services are consumed and used by 8 external service consumers.
GCCS-J is approved to only do sustainment and synchronization work	GCCS-J approved to do sustainment, synchronization and limited modernization work on April 2010
No one is using GCCS-J	GCCS-J is widely used by all the combatant commands, all Service GCCS programs, USCG, DIA, NSA

CENTCOM J3 user quote "GCCS-J is dedicated to supporting operational needs and does not get recognition for the fact that it is the heavy lifter used in our daily jobs."

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GCCS-J in Current Ops & Joint Environments

GLOBAL

- **Estimated number of GLOBAL users: 35,000**
- **Current Operations:**
  - ✓ Operation NOBLE EAGLE
  - ✓ Counter Piracy Ops
  - ✓ Blue Force Tracking for OND, OEF, and OUP
  - ✓ Synchronized NATO/Coalition Air Picture for Libya Operations
  - ✓ Joint Interagency Task Force South
  - ✓ Missile space operations

SORTS

- **Number of SORTS accounts: 1,977**
- **Current Operations:**
  - ✓ Central registry of all U.S. Armed Forces for readiness reporting, deliberate and crisis action planning
  - ✓ Critical component of the Chairman's Readiness System
  - ✓ Provides critical data for GFM rotational and force sourcing analysis/decisions

Joint Operations Planning and Execution System (JOPES)

- **Number of JOPES users: 7,491**
- **JOPES transaction trend:**
  - ✓Jan 11: 7.63 million
  - ✓Dec 10: 4.67 million
  - ✓Nov 10: 5.65 million
  - ✓Oct 10: 6.59 million
  - ✓Sep 10: 6.38 million
  - ✓Aug 10: 6.52 million
- **Current Operations: All named operations use JOPES**
  - ✓Operation ENDURING FREEDOM (OEF) Surge
  - ✓Operation NEW DAWN (ONF) Redeployment
  - ✓Operation UNIFIED PROTECTOR (OUP)
- **Total number of passengers moved in support of OEF and OIF/OND is more than 7 million**
- **Total amount of cargo moved is more than 12 M STONS**

GCCS-J is used every day in full spectrum, joint operations

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GCCS-J in Support of Services

GCCS-J Infrastructure, COP, and I3 components are used by the Service unique GCCS-FoS variants to support daily operations

GCCS-M

- **Number of systems: 295**

DJC2

- **Number of systems: 8**

USCG

- **Number of systems: ~100**

TCO

- **Number of systems: 209**

GCCS-AF

- **Number of systems: ~250**

GCCS-A

- **Number of systems: 217**

Over 1000 GCCS-J Component deployments for Services in addition to 53 critical sites

GCCS-J Sustainment & Synchronization

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Baseline	Version	GCCS-A	GCCS-AF	GCCS-M	TCO	Solaris	Microsoft	Web Logic	Oracle	Java	Firefox
Global	4.1.0.3					8	Server 2003	8.1 SP5	8i 8.1.7	1.4.2 / 1.5	Mozilla 1.7 / Firefox 2.0
Global	4.1.0.4										
Global	**4.1.0.5**						Client XP				
Global	4.1.1					10 (08/07)		9.2 MP2			
Global	4.1.1.1	4.1bP3 (10.0.0P3)	AF SE 4.1.1		Firefox 3.0.10 Solaris 10 (10/08)		Office 2003		10g 10.2.0.x	1.5	Firefox 2.0
Global	**4.1.1.2**	4.1bP5 (10.0.0P5)			Firefox 3.6.3 Solaris 10 (10/09)						
Global	4.2.0		AF SSE 4.2				Server 2003		11g 11.1.0.x		
Global	4.2.0.1										
Global	4.2.0.2						Client XP				
Global	**4.2.0.3**			4.1.0.0							Firefox 3.0
Global	*4.2.0.5*						Office 2007				
Global	*4.2.0.6*										
Global	*4.2.0.7*			*4.1.0.1*							Firefox 3.5
Global	***4.2.1***	*4.2b*		*4.1.1.0*		***10 (10/09)***		***10.3.1***		***1.6***	***Firefox 3.6***
JOPES	***4.2.1***										

Global Release	Short Description	ISAF	CENTRIX-K	Japan (DISA)	ADF Australia (GCCS-AF)	NORAD Canada
4.1.0.3	Firefox 2.0					
4.1.0.4	SA/I3 Fixes					
4.1.0.5	**GORA patch**					
4.1.1	Major Release					
4.1.1.1	SA/I3 fixes					
4.1.1.2	**SA/I3 fixes**					
4.2.0	Major Release					
4.2.0.1	Turbo Planner					
4.2.0.2	SA/I3 fixes					
4.2.0.3	**IAVAs, Firefox 3.0**	x	x		x	x
4.2.0.5	*Newsgroups*					
4.2.0.6	*Agile Client*	x	x		x	
4.2.0.7	*Firefox 3.5, Telecllent, SA/I3 Fixes*		x	x	x	x
4.2.1	***Infrastructure Upgrades***	x	x	x	x	x

GCCS-J Global Release	Short Description	Release Message	ATO End	Sunset	GCCS-A Ver/End Date	GCCS-AF Ver/End Date	AOC WS Ver/End Date	GCCS-M Ver/End Date	TCO Ver/End Date	JDISS
4.0.2	Inf/SA/I3 Upgrades	Aug 06	Aug 09	1 Aug 09	4.0b2/ 12/11		10.1 Rel1013 / 08/12		4.0.2.1	
4.1.0.3	Firefox 2.0	Sep 07	Aug 10	20 Aug 10						
4.1.0.4	SA/I3 Fixes	Jan 08	Dec 10	30 Sep 10*				4.0.3		4.1.1.2
4.1.0.5	GORA patch	Jan 08	Dec 10	30 Sep 10						
4.1.1	Major Release	Nov 08	Nov 11	30 Sep 10		4.1.1 / 01/1				4.2 / 4.2.0.1-4
4.1.1.1	SA/I3 fixes	Sep 09	Jul 12	30 Sep 10	4.1bP3/ 2/12				4.1.1.1 / 12/12	4.2.0.5
4.1.1.2	SA/I3 fixes	Jan 10	Jul 12		4.1bP5/ 2/12		10.1 Rel10xx / 05/13		4.1.1.2 / 12/12	4.2.0.6
4.2.0	Major Release	Apr 09	Mar 12	30 Sep 10		/ 07/11				
4.2.0.1	Turbo Planner	Nov 09	Jul 12	30 Sep 10						
4.2.0.2	SA/I3 fixes	Dec 09	Nov 12	30 Sep 10						4.3.0.0
4.2.0.3	IAVAs,FFWEB 3.0	Feb 10	Nov 12					4.1.0.0/??		
4.2.0.3U3	JOPES 4.2.1 compatibility	Pre-JOPES SAT	N							
4.2.0.5	Newsgroups	Aug 10	Apr 13							
4.2.0.6	Agile Client	Jan 10	May 13							
4.2.0.7	FF 3.5, Telecllent, SA/I3 Fixes	TBD (2010)	Nov 13				10.1 RE11 Rel10xy / TBD	4.1.0.4 ??	4.2.0.7 / 11/13	4.3.0.1
4.2.0.7U3	JOPES 4.2.1 compatibility	TBD	Nov 13							
4.2.1	Infrastructure Upgrades	TBD (2011)			4.2b planned	4.2.1 / 2012		4.1.1.0 / TBD		4.3.1.0

COTS Versioning Synchronization for GCCS-J releases

Synchronization of GCCS-J Global releasable versions and FMS cases

Synchronization between GCCS-J Global releases and GCCS FoS

- **Ensure all operational releases are secure**
- **Provide critical fixes for operational issues**
- **Sustainment of JOPES v4.2.0.1**
- **Sustainment of SORTS v4.2.0.1**
- **Sustainment for five Global releases: Global 4.1.1.2, 4.2.0.3, 4.2.0.5, 4.2.0.6 & 4.2.0.7**
- **Synchronization with GCCS FoS and all external apps**

GCCS-J Monitored Sites

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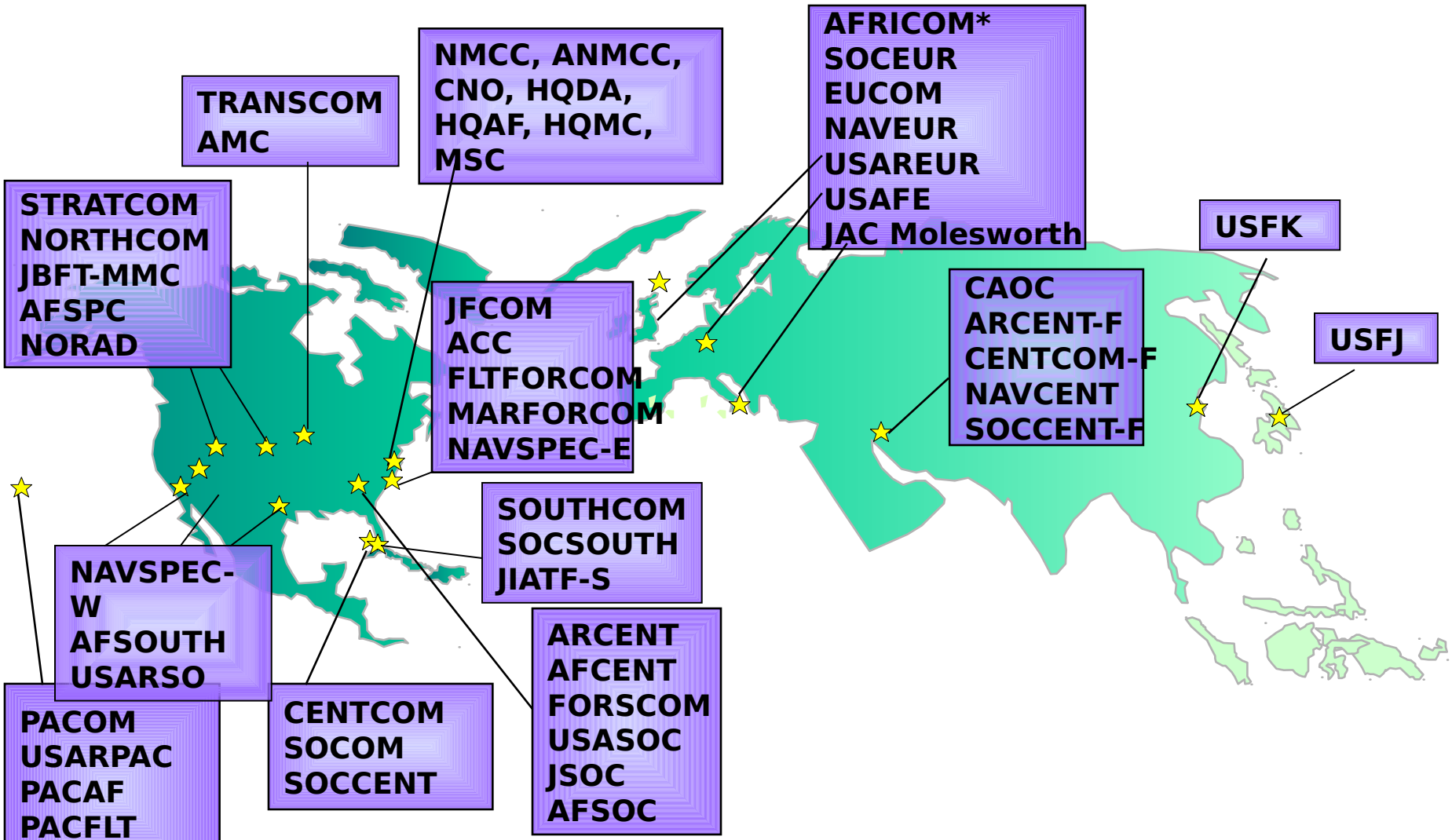

53 Critical Sites

*Note: AFRICOM is pending as a critical site

July 2011

GCCS-J Key Internal & External Interfaces

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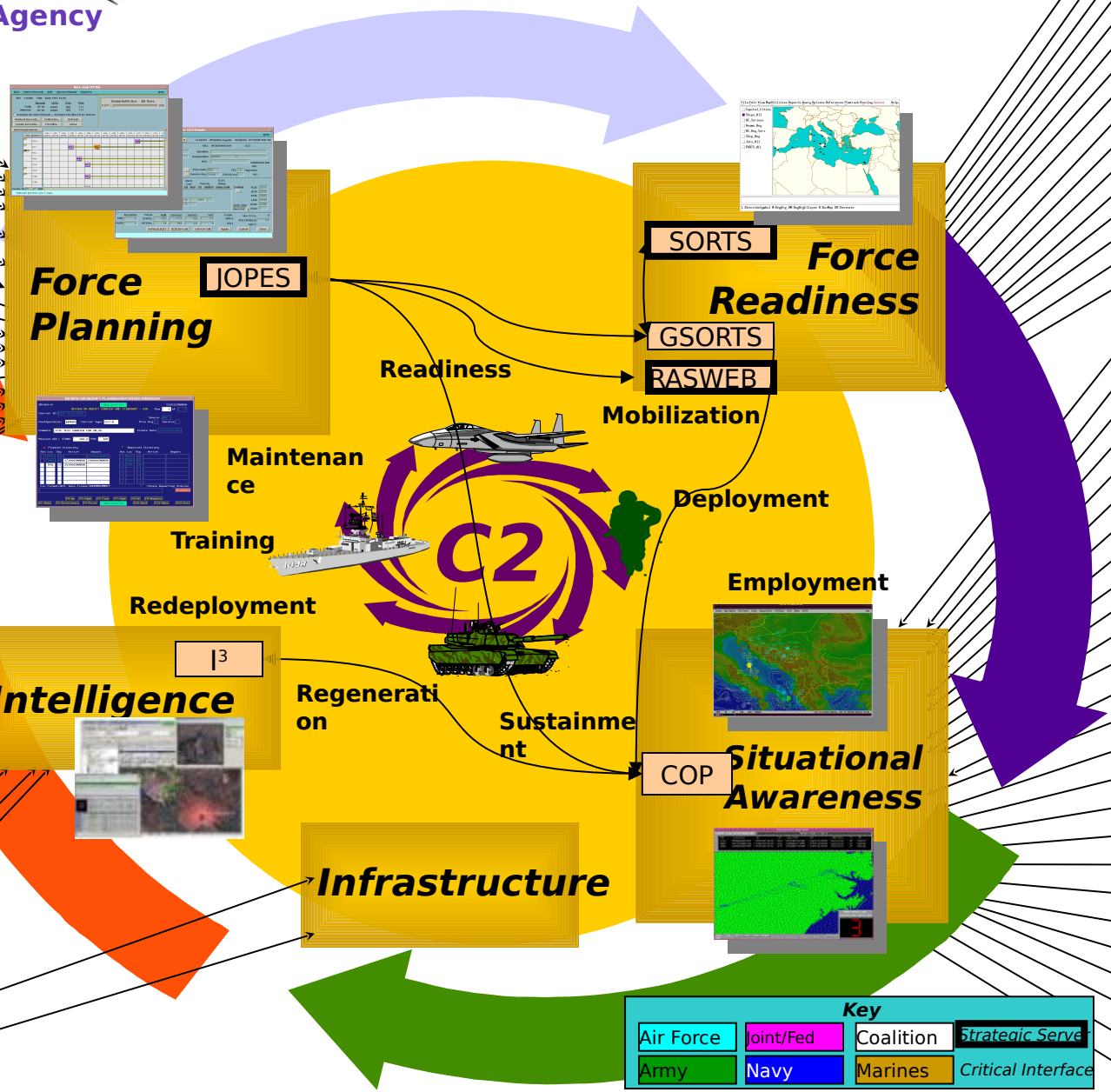

CAMPS
AMC/618 TACC
WebHoc Query
DCAPES
DRRS-A
COMPASS
Transviz
GCSS
JRAMS
GTN
IGC/GTN
JPES
SMS
JFAST
JCRM
JFP
DARWIN
JFRG II

AFWA
AFIWC
ASAS
MIDB
NGA DTED
GALE Lite
NGA IPL
CIDNE
NGA Map (WMS)
UAV GCS
Google
PRISM
DTRA
ONI
DMS

HBSS
AntiVirus/Spyware

Speed of Light
DRRS-AF
S2
DRRS-A
WebHoc Query
DMDC
OUSD P&R
DRRS
JSM
GCSS
GFMTS
PACAF
DARWIN
DRRS-N
DRRS-MC
MCRT

GCCS-AF
TBMCS
GDSS
Coalition C2
ICCI
GCCS-A
MTIX
MMC
JSWS
DTRA
IBS-S
IBS-I
SDDC - TEA
GTN
ETMS
SBMCS
ADSI
Link 11/16
NBC
NGA
GCCS-M
USCG
USNO
NRTD
TCO
C2PC GWY

GCCS-J FY11/12 Sustainment & Synchronization Releases

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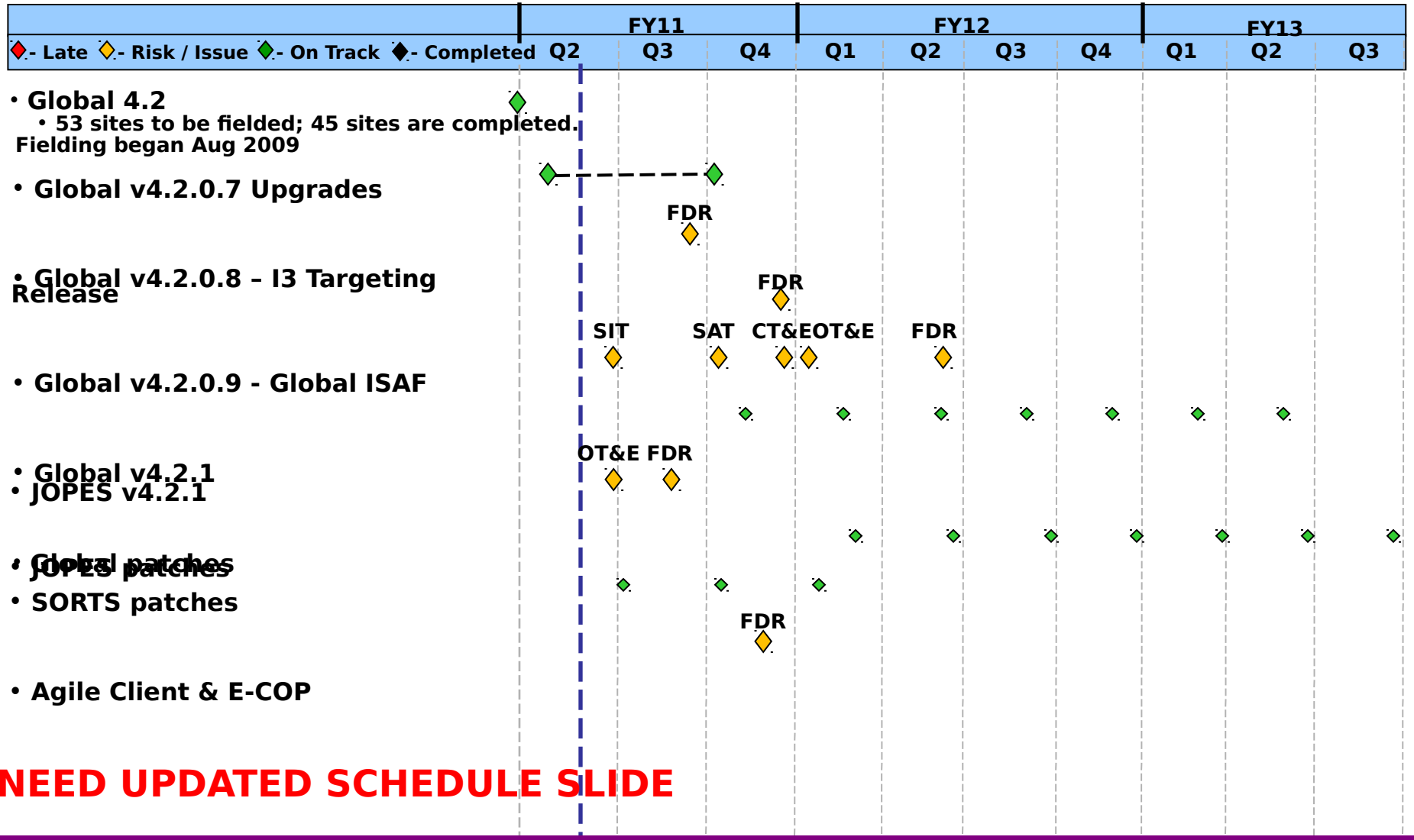

NEED UPDATED SCHEDULE SLIDE

Pending Final Prioritization From JFCOM and JS/J3

As of: 28 Feb

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Status of GCCS-J Releases

- **Summary of release targeted for fielding in the next 6 months:**
  - **JOPES 4.2.1**
  - **Global 4.2.0.7 U2 (client release only to support JOPES 4.2.1)**
  - **Global 4.2.0.8**
  - **Global 4.2.0.9**
  - **SORTS 4.2.0.1 U1**

- **Summary of releases in the last 6 months:**
  - **Global 4.2.0.7 U1, U3 & U4**
  - **Global 4.2.0.7 Emergency Updates**
  - **SORTS 4.2.0.1**

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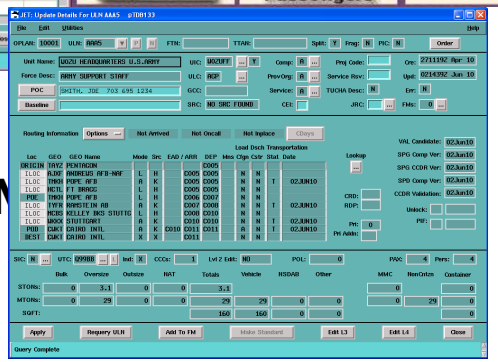
GCCS-J -- JOPES

- **GCCS-J JOPES is the system used to monitor, plan and execute mobilization, deployment, employment and sustainment activities associated with joint operations**
- **GCCS-J JOPES software is primarily focused on the TPFDD**
  - **Force Deployment Planning**
  - **Supports Crisis Action Planning (CAP) and Deliberate Planning**
- **JSSC remote systems management with 4 strategic server and 2 Deployables**
- **JOPES process activities:**
  - **Deploying Forces from Origi**
    to Des
  - **Identification of Units**
  - **Quantifying lift requirement**
    - **Equipment (area, weight & square footage)**
    - **Passengers**
  - **Validation of requirements to USTRANSCOM**
  - **Scheduling & Movement**
    - **Airlift & Sealift Missions**



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Status of JOPES 4.2.1

- **Release highlights**
- **Status**
- **Schedule**

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GCCS-J -- Global Situational Awareness

- **Common Operational Picture (COP) is a part of the Global baseline**
- **Presents an integrated, near real-time pi battlespace for executing military operat**
  - **Theater Missile Defense**
  - **Red and Blue Force Picture**
  - **Air Tasking Exchange**
  - **Alerts**

- **Benefits:**
  - **Used to correlate and share situational awareness, monitor, and assist in mission employment.**
  - **Critical tool in Allied and Coalition Operations (e.g., ISAF and USFK)**
  - **Provides asymmetric capability that no other nation provides**
  - **Provides improved Friendly Force Tracking- reduces fratricide**
  - **Provides an automated method of transferring, receiving, and synchronizing data across the battlespace**
  - **Mechanism for a distributed data processing and exchange environment that allows each AOR to tailor the view to their role**

GCCS-J -- Global Situational Awareness
US and Coalition/NATO Information Sharing

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Joint Operations and Environment

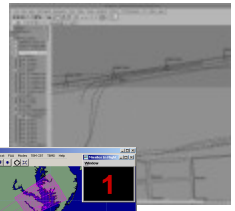
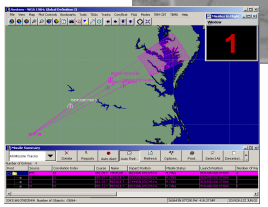
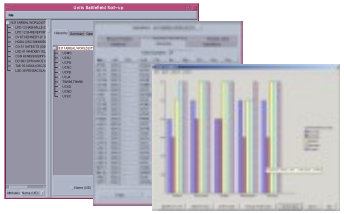
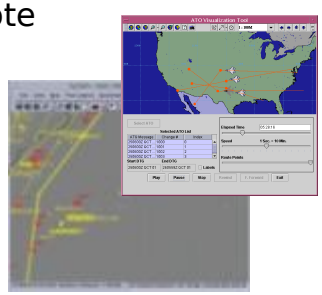
National policy and domains

Various sources and levels

Simple existing technology

National and remote support

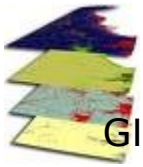
Strategic Significance

Information

Data distribution

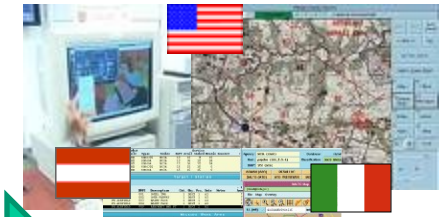
Sources & Interoperability



GIS
FBCB2
Missile

ATO
JREAP

National systems



Illustrates of the GCCS-J information flow: multi-national data collection, information available to be provided , correlated and fused to create and

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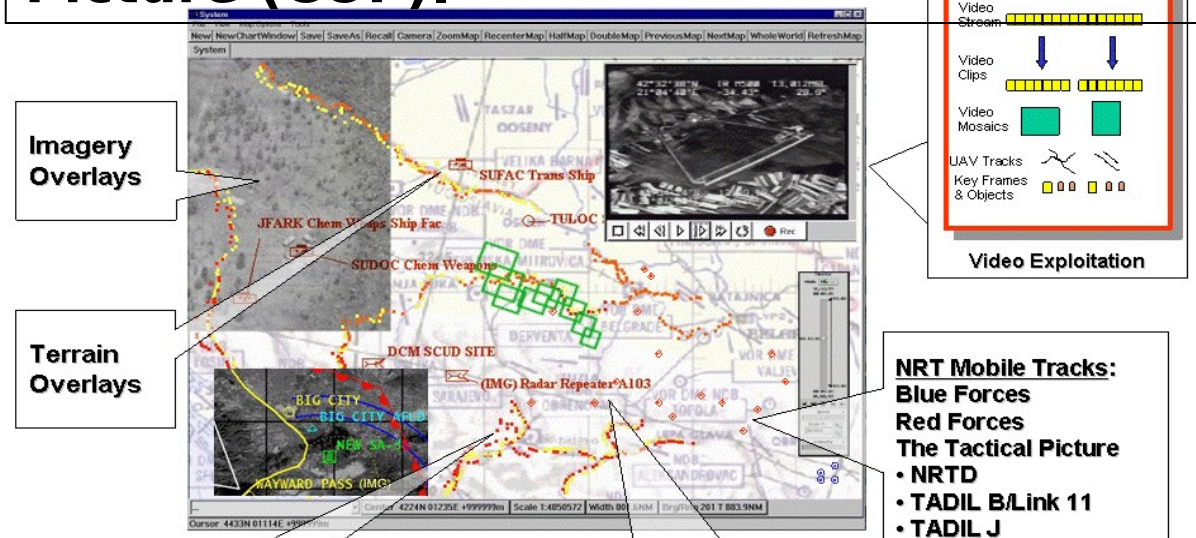
GCCS-J -- Global Integrated Imagery and Intelligence (I^3)

I-Cubed
Integrated Imagery & Intelligence

Provide tools and services for <u>Intelligence Support to the COP</u>, a Joint Service intelligence fusion capability in the context of the Common Operational Picture (COP).

I²: Intelligence Support to the Common Operational Picture (COP)



<u>Intelligence Overlays</u>
- OOB, GMI, Targeting, IE&O
- Ground Forces, Individuals
- Air OOB
- Maritime OOB
- Organizations, Facilities

NRT Video Footprint and Sensor Tracks

<u>NRT Mobile Tracks</u>:
Blue Forces
Red Forces
The Tactical Picture
- NRTD
- TADIL B/Link 11
- TADIL J
- TIBS/TBMD
- TADIL A
- TRAP/TBMD
- PLRS/EPLRS

Integrated into GCCS-J and all Service variants -GCCS Family of Systems (FoS) and the AOC Weapon System

Deployed on JWICS, SIPRNET, and Coalition Networks

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Status of Global 4.2.0.8

Background

- **Global 4.2.0.9 identified as a mitigation release after Global 4.2.1 delayed into FY 13**
  - **Global 4.2.0.9 schedule impacted by funding issues, content discussions and technical challenges**
- **AF/AOC and Army have nearer term dependencies**
  - **Volunteered to cost share Global 4.2.0.9**
  - **Requested special support for expedited delivery**
- **Compressed schedule to meet AF and Army milestones**
  - **Content tradeoffs to future releases**
  - **Revised schedule is very aggressive with an FDR in Jan12 and targeted engineering drops**

Current Status

- **Destructive-load/build ongoing for SIT installation**
- **Leveraging previous unfielded development and documentation for expedited release**
- ***Content, schedule, test & fielding strategy is now baselined and the review of these materials is the purpose of this Deep Dive***

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Status of Global 4.2.0.9

Key Components:

- **Adding Capabilities-Based Deployment (CBD)**
  - ***Improved installation mechanism***
- **COTS Software Refresh**
  - ***Extended SW support durations, IAVA resolutions***
- **Upgrading underlying Infrastructure**
  - ***Ability for entire baseline to run on newer HW***
- **Minor functional enhancements**
  - ***Improvements to I3, SA, SE tools***
- **Updated Documentation**
  - ***Updates to Resource Recommendation Guide, SAM, SAG, GUM***
- **AF/AOC and Army cost share partners and established milestones**

Schedule Milestones:

- **TBD**

AF/AOC & Army cost share partners with established milestones

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Why is Global 4.2.0.9 Important?

- **Continue to take steps towards reducing sustainment cost drivers**
  - **COTS and HW licensing**
  - **Number of deployed sites and/or fielding support for installation or SMEs**
- **Improve site's ability to easily sustain and support Global enclave**
  - **Continue to incorporate COTS and HW tools to allow for easier system administration**
  - **Increase installation consistency and flexibility**
  - **Reduce installation timeline**
  - **Reduce administrator maintenance workload**
  - **Easier to configure and maintain**
  - **Easier to update**
- **Evolution of the GCCS FoS through lessons learned**
  - **Cost sharing**
  - **Developing and vetting processes across the FoS based on projected and actuals**
  - **Testing reciprocity – what works, what doesn't**
  - **Execution of joint requirements: TIPRs, data, users**

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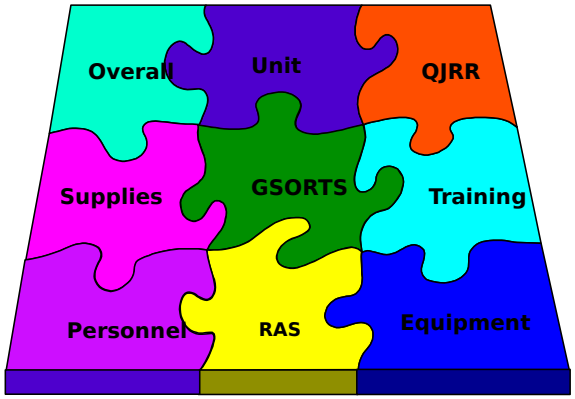
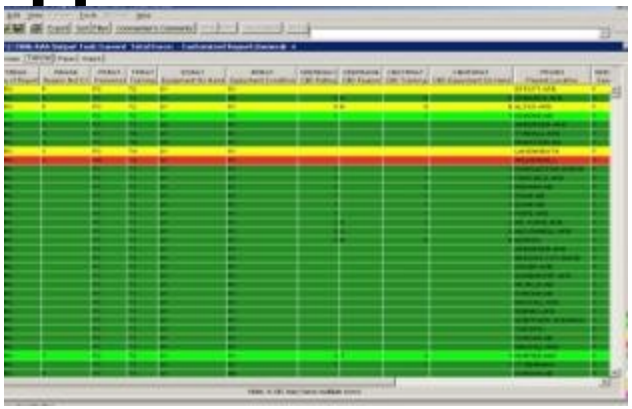
GCCS-J -- SORTS

- SORTS provides integrated, automated reporting and assessment toolset providing vital readiness information needed to make timely resource allocation and force commitment recommendations to decision makers
- Fielding Concept: Remote management from JSSC
- Secure Server Enclaves: Primary and alternate with ~ 1K accounts (planned estimate ~2K Users)
- Sustainment funding will be provided by OSD P&R if DRRS DIO is delayed beyond FY 11





GCCS-J Global Current State

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Current State

UPDATE GRAPHICS

- Expensive license and support based agreements for COTS products from several vendors has out lived value to the government
- 14 unique clients interfaces in Global Baseline
- Vendor specific hardware on less prevalent instruction set architecture (SPARC) -- expensive to maintain and difficult/time consuming to administer
- Approximately 12 baseline releases under PMO sustainment/synch responsibility
- Approximately 21 baseline releases that are used by the community (e.g. FoS etc.) result in critical operational issues that require immediate resolution
- 53 critical sites under PMO responsibility to install and provide maintenance for
- 1000’s of local Global enclaves installed world wide to include Services, coalition networks, releasable versions and FMS cases
- Increased focus, synch and support for FoS partners using the Global infrastructure components

GCCS-J Modernization Vision

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UPDATE GRAPHICS

Goals

- Continue to decompose applicable existing applications into services
- Limit local deployment and move as much to the enterprise as possible
- Continue to expose data and scale services to support an enterprise implementation
- Continue to evolve more economical hardware and software architecture without impact to the operational user or FoS/interface partners
- Reduce overall sustainment cost through use of more cost effective and appropriate COTS and HW products
- Evolve to use of agile development practices
- Consolidation of clients and tools

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Client Consolidation
Problem Statement

- GCCS-J has multiple C2 clients within the Global baseline
  - Different visualization approaches and client platforms supported depending on the Mission Application area and operational capability being implemented
  - Total cost of ownership for the Global baseline is therefore increased
  - Resources that could otherwise be used to develop new C2 capabilities are siphoned away on redundant infrastructure

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Common C2 Client Goals

- Define a common Rich Client and Web Client Framework
  - Represent all areas of C2
  - Maximize reuse and complimentary functionality
- Provide ease of integration of capabilities, data and services
  - Discovery of capabilities and data resources
- Common look and feel between Client Frameworks
  - Improve user experience
  - Reduce Learning Curve
  - Streamlines user feedback
- Customized User Experience
  - Ability to tailor client features based on chosen components and user needs and roles.
- Support existing and emerging standards for C2 architecture
  - Compare existing client apps and platforms and future client foundations against Joint C2 objective architecture guidelines

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Common C2 Client Principles

- Develop capabilities only for the appropriate client frameworks
  - Only evolve existing C2 capabilities onto a specific platform if a use case supports it.
  - For example: Don’t produce a web app of an existing rich client capability without confirming whether a user need exists for it in that target environment.

- Support a shared/common client infrastructure where appropriate
  - Common methods for administration and maintenance
    - Update Centers
    - Data Source access/configuration
  - Common work flows for stream-lined user productivity
  - Common User Visualization
    - Filtering, Search and Display standards
    - Reduce Training burden

- Support GCCS-J N-Tier Architecture and Enterprise Initiatives
  - Allocate functionality to the appropriate tier
  - Transition clients to service-based solutions and platforms
  - Provide Core C2 Visualization services (e.g. Plot Management Framework)
  - Utilize data and business logic services (don’t overload in the client tier)

- Evaluate client foundations and solutions based on key criteria
  - Performance
  - Data Flow (Bandwidth and DIL considerations)
  - Security
  - Extensibility

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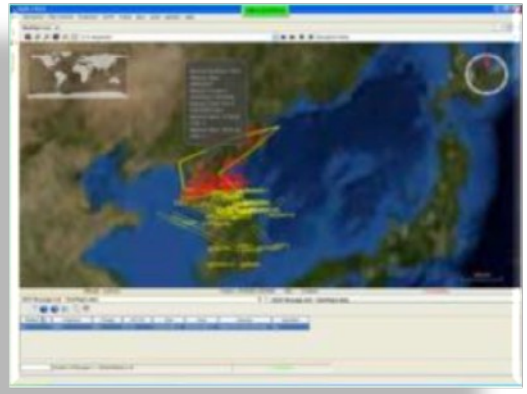
GCCS-J -- Global *Client Consolidation*

- The GCCS-J Program Office is consolidating clients over time (14 clients currently in global baseline) to reduce sustainment costs and provide greater flexibility in addressing user requirements

Agile



- ✓ Rich Client (installed locally on workstation)
- ✓ Extensible Open Source Framework (Java NetBeans)
- ✓ High performance distributed caching
- ✓ Third Party development model supported via plug-ins
  - ✓ Software Development Kit
  - ✓ Developer workshops
- ✓ Network deployable
- ✓ Support for Disconnected, Intermittent, and Limited Connectivity environments (DIL)

Joint C2 Common User

- ✓ Thin Client (accessed via web browser)
- ✓ Extensible Open Source Framework (Ozone Widgets)
  - ✓ Ozone Widget Framework managed by Government Open Source Software (GOSS) Consortium
- ✓ Third Party development model supported via widgets
  - ✓ Software Development Kit
  - ✓ Developer workshops
- ✓ Hosted/provisioned via enterprise nodes

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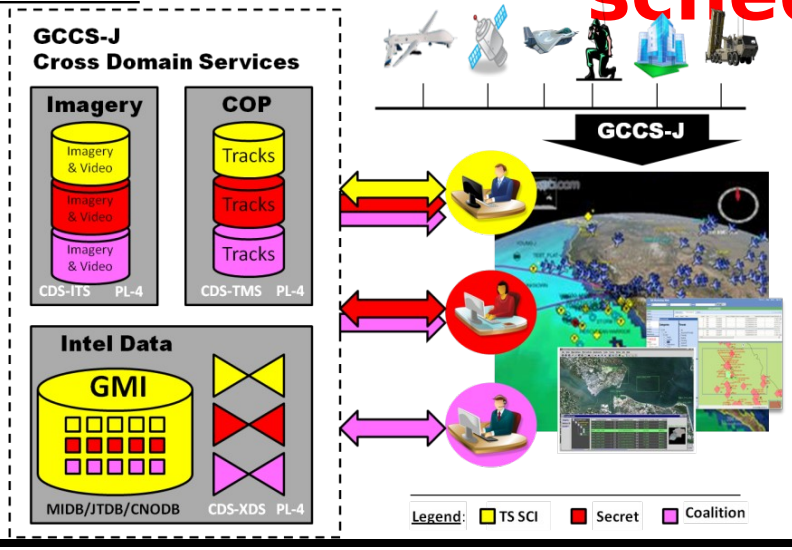
FY 11 Status Update needs include what will be delivere the field in FY 11 and associa schedule – no more than 1-2 s

Overview



Requirement:

- This capability responds to the requirement derived from JC2 CDD 3.1.6, 9.2 Cross-Function Security Cross Domain Services and captured in NRID 430

Pedigree:

- JC2 Capability Development Document (CDD), Ext. D para:3.1.6 (SCI Level info), 9.2 (secret and below)
- NRID items: 266, 294, 297, 309, 312, 337, 379, 430, 440, 545, 615
- 267, 281, 284, 348, 351, 352, 356, 358, 372, 454, 476, 483, 487, 489

Description:

Improve the quality and consistency of GCCS-J COP and I3 data flows and interoperability between SCI, Collateral, and Coalition networks.

- Provide cross domain data synch for GCCS-J data: COP (i.e. track data), structured intelligence, and imagery information files
- Provide robust services for web-enabled COP and Intel support
- Achieve hardware and system administration efficiencies to reduce the number of guards and cloned systems currently deployed to share GCCS-J data
- Deploy IOC to DoDIIS SE CONUS RSC in support of USCENTCOM
- Sustain interoperability with GCCS-J FoS and follow-on capabilities

Value to the Warfighter:

- Improve timeliness and relevance of actionable intelligence and decision support provided to JTF, Theater, and Tactical Commanders
- Reduce complexity of delivering GCCS-J managed content, applications, and services across security domains
- Streamline workflow and improve user experience in operating across several security domains
- Full Cross Domain COP Synchronization
- Reduce hardware footprint for guards and cloned servers

Dependencies:

UCDMO, Radiant Mercury, CDES, MIDB, IPL, JTDB, E-COP

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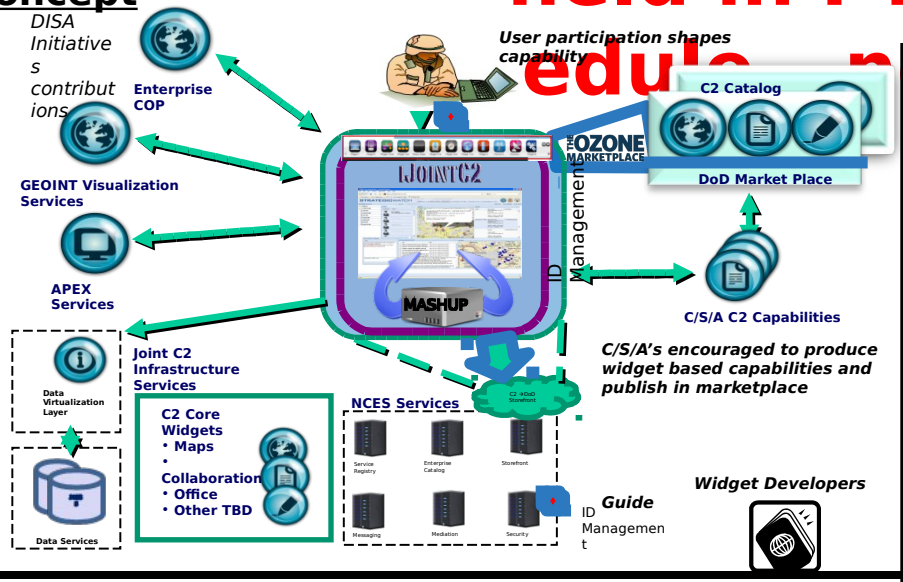
FY 11 Status Update needs to include what will be delivered to the field in FY 11 and associated edule, no more than 1-2 slides

Concept



Requirements (Objectives):

This responds to the requirement derived from JC2 KSA #1 and #2, supporting shared situation awareness via widget framework. Requirements are derived from multiple functional areas of the JC2 CDD, and OSD Storefront, NSLDSS, and GCCS J market research related activity

Pedigree:

- JC2 Capability Development Document (CDD), Ext. D para: 4.1.28, 9.9.1, 9.9.3
- NRID items: 266, 267, 281, 284, 348, 351, 352, 356, 358, 372, 454, 476, 483, 487, 489

❖ Received JC2CUI CDP Nov 30, incorporating into Agile dev plan

Description:

Common User interface allows for single entry point for the warfighter to access C2 capabilities via the world wide web. FY11 Focus:

- Build and deploy a web client environment called the Joint C2 Common User Interface for single access point to disparate C2 web applications
- Provide a Widget-based framework on NIPR and SIPR
  - Based on the NSA developed Ozone Widget Framework
  - Integrate single sign-on solution for identification management
- Provide a base library of "widgets" (Core and C2 specific)
- Provide a Marketplace for the discovery and deployment of capabilities (widgets) – based on Ozone Market Place (OMP)
- Encourage broad participation from C/S/As for contributing and use

Value to Warfighter:

Starts transition to a single entry point for access to C2 capabilities
Due to seamless interface to capabilities JCUI simplifies training and increases the utility of the system due to reduction in different tools
Significant increase to the ease of use of current highly capable but complex GCCS and other POR client applications
Lightweight single purpose web applications based on the same data and functionality of GCCS (for users who don't need full GCCS Client functionality)
Allows users to organize and define their own C2 Application desktop and profiles
Greatly reduces time to field capabilities as web applications (widgets)
Access to a growing Marketplace of widget based capabilities on the Enterprise (in the cloud)

Approach:

Execute as an Agile Development process with user centered design as preferred practice (NORTHCOM, CENTCOM, PACOM, TRANSCOM)

Dependencies:

RACE, Forge.mil, NCES, DoD Storefront , CWF, OWF Framework evolution (Note: DISA new member of OWF GOSS)

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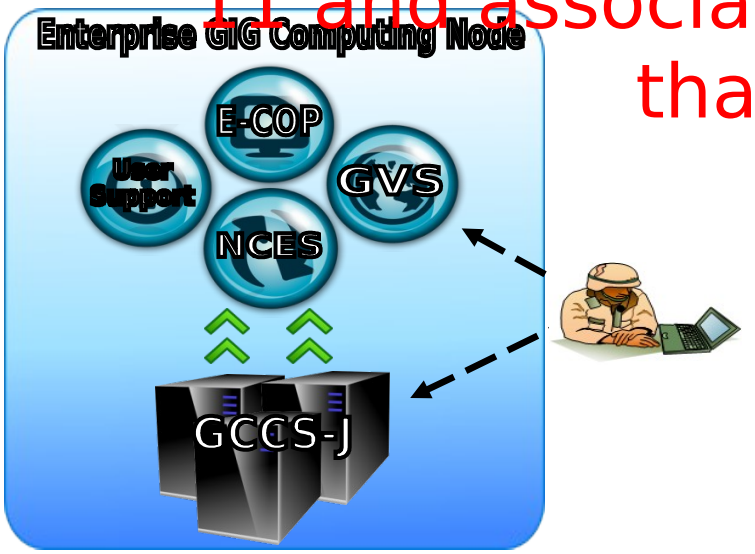
FY 11 Status Update needs to include what will be delivered to the field in FY 11 and associated schedule – no more than 1-2 slides

Concept



Requirement:

This capability responds to the requirement derived from 4.1 Shared Situation Awareness and various NRID COP Related requirements (i.e.., JC2 CDD 1.3.8, 9.1, 4.1.10 Map Displays, 4.1.20 Global COP, KPP #1 Shared Situational Awareness, and NRID requirements)

Pedigree

- JC2 Capability Development Document (CDD), Ext. D para: 1.1.12, 4.1.8, 4.1.11, 4.1.15-.18, 4.1.20-.22, 4.1.24, 4.1.26-.27, 6.4.9.1, 6.5.5, 7.1.3, 7.3.1
- NRID items: 266, 284, 309, 312, 337, 348, 356, 360, 379, 392, 440, 508, 515, 517, 544, 586, 594, 595, 596, 597, 598, 603, 615
  - *Virtual Works pace*
  - *Intelligence Intégration*
  - *Unclass COP*
  - *Agile Client*

Description:

Expand COP user base and accessibility by establishing an enterprise accessible Common Operational Picture that allows authorized users to visualize COP data from any location on GIG using a web browser or agile client.

Exposing Joint COP track data via standards based web services for consumption by other apps, services, systems

Encourage agile development with user centered design that produces multiple builds guided by continual user involvement

Dependencies: NCES, Forge.mil, RACE, GVS,

Value to the Warfighter:

Increase situational awareness by simplifying user access to the COP
Enhance technical operations and support infrastructure
Enhance remote data management capability
Improve rich client and web-based visualization
Improve Access to additional data sources through GVS
Provide consistent look and feel for user access to COP data with enterprise visualization tools
Improve access to COP data via managed web services
Start to update and evolve CONOPS/SOPs/TTPs for centralized (enterprise) COP management

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Summary

Need to update

DEFENSE INFORMATION SYSTEMS AGENCY

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Backup

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Acronym Listing

- CAMPS Consolidated Air Mobility Planning System
- LOGCAT/ BCAT Logistician's Contingency Assessment Tools/ Beddown Capability Assessment Tool
- WHQ WebHoc Query
- DCAPES Deliberate Crisis Action Planning and Execution System
- AF Weather AF Weather Agency
- TBMCS Theatre Battle Management Core Systems
- AFIWC Air Force Information Warfare Center
- AFSORT DET Air Force SORTS Data Entry Tool
- JADE Joint Assistant for Deployment & Execution
- AFSATCOM/ TIBS Air Force Satellite Communications - Tactical Information Broadcast System
- GDSS Global Decision Support System
- ALOG Army Logistics
- GCCS-A Global Command and Control System - Army
- TAG TPFDD Access Gateway
- COMPASS Computerized Movement Planning And Status System
- FOCUS Force Operation Characteristics Unified System
- ASAS All Source Analysis Remote Workstation
- ASORTS Army SORTS
- SDDC-TEA Surface Deployment and Distribution Command – Transportation Engineering Agency
- JSTARS Joint Surveillance Target Attack Radar System
- MAGTF II Marine Air Ground Task Force II
- GOMERS Global Online Marine Editing and Reporting System
- IAS Intelligence Analysis System
- FSR – Force Status Readiness (USSTRATCOM)
- JSC – Joint Spectrum Center
- DARWIN Dynamic Analytical Reporting Web-based Interactive Navigator
- USN Observatory Time Source US Naval Observatory Time Sync Interface
- TRMS Type Commander Readiness System
- GCCS-M Global Command and Control System - Maritime
- NNSOC Naval Network and Space Operations Command
- FNMOC Fleet Numerical Meteorological and Oceanographic
- NRTD Near Real Time Data
- AMP Analysis of Mobility Platform (USTRANSCOM)
- MAT Medical Analysis Tool
- SMS Single Mobility System
- ICIS Integrated Consumable Item Support
- JFAST Joint Flow And Analysis System For Transportation
- TCAIMS II Transportation Coordinators Automated Information For Movement System II
- MIDB Modernized Integrated Database
- NGA 5D Demand Driven Direct Digital Dissemination
- WinJMEM Windows – Joint Munitions Effects Manual
- NGA IPL Integrated Products Library
- UAV GCS Unmanned Aerial Vehicle Ground Control Station
- GPS Global Positioning System Time Source
- DMS/AMHS Defense Message System/Automated Message Handling System
- Raindrop Raindrop Point Mensuration
- DMDC Defense Manpower Data Center
- CFAST Collaborative Force-Building Analysis Sustainment and Transportation
- DRRS Defense Readiness Reporting System
- FEDB Failure Experience Data Bank
- FEDMTC Federal Multi-TADIL Capability
- JRAMS Joint Readiness Automated Management System
- TDDS Tactical Data Dissemination System
- TRIXS Tactical Reconnaissance Intelligence Exchange Service
- GALE Lite Generic Area Limitation Environment
- GTN Global Transportation Network
- ETMS Enhanced Traffic Management System
- SBMCS Space Battle Management Core System
- ADSI Air Defense System Integrator
- EPLRS Enhanced Position Location Reportying System
- QTRACS Qualcomm Tracks
- ADAMS Allied Deployment and Movement System
- NATO ICC NATO Integrated Command and Control
- NATO JOIIS Joint Operations Intelligence Information System

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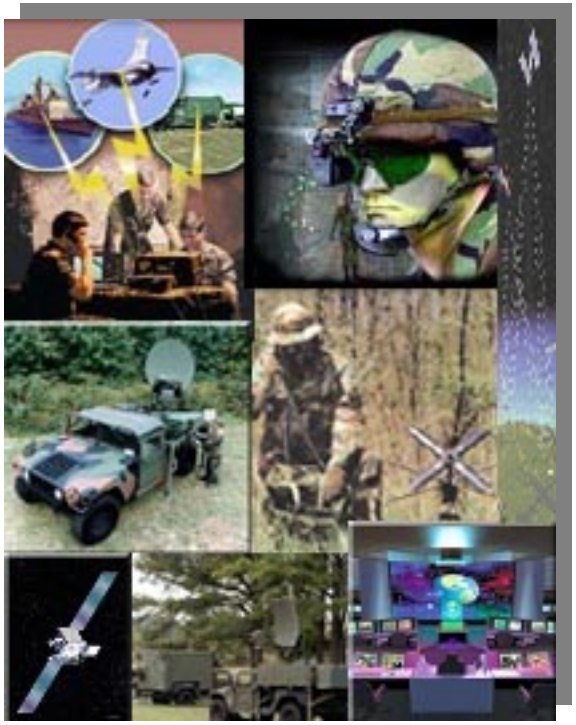
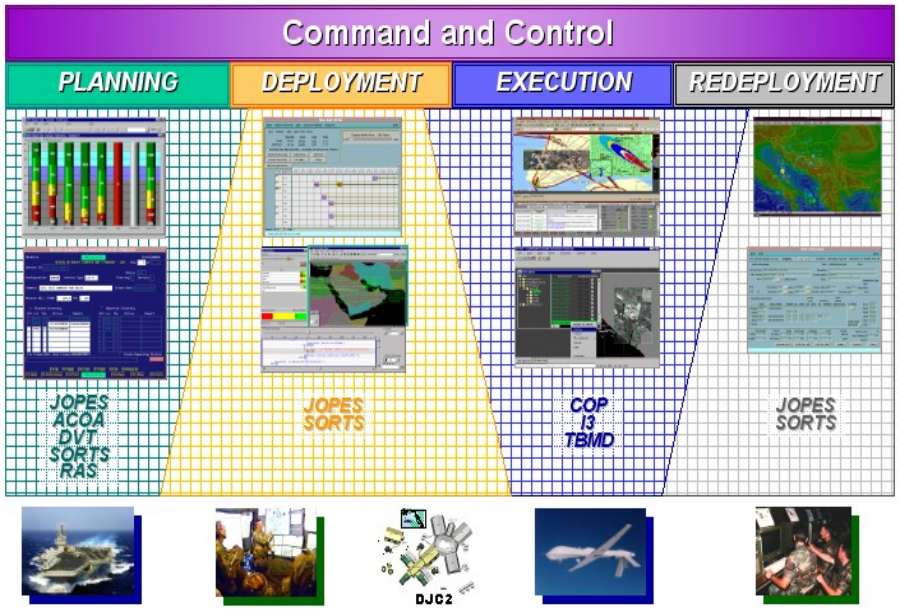
GCCS-J
Vision and Goals

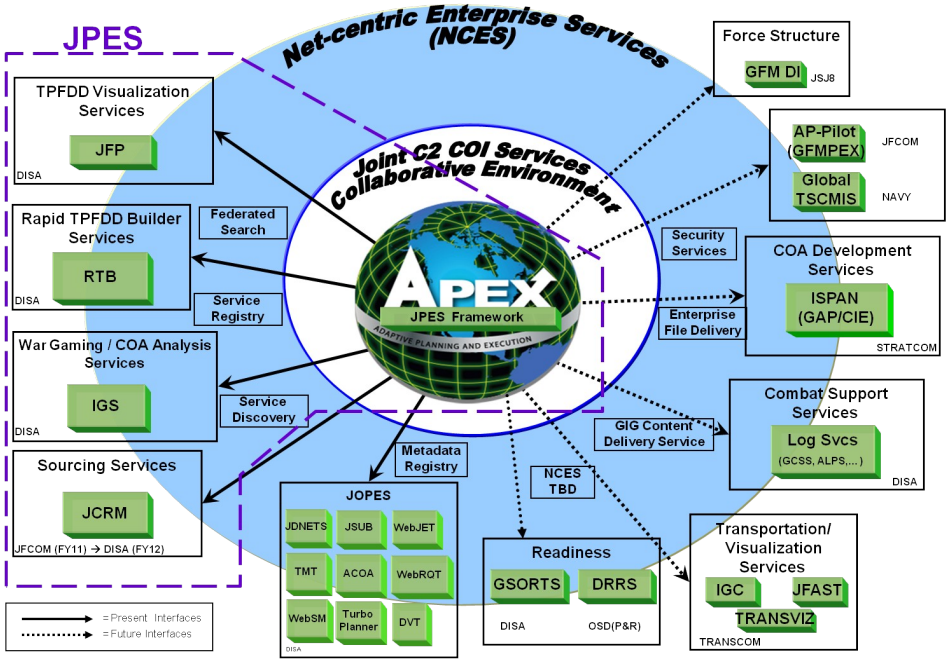
- **Vision**
  - **Provide the Joint Commander with the premier Command and Control (C2) capability that is secure, interoperable, and responsive to current and future war fighter requirements**
- **Goals**
  - **Provide an integrated, flexible, and secure system infrastructure**
  - **Sustain the installed / currently fielded system**
  - **Provide new and enhanced functionality in response to validated and prioritized requirements**
  - **Provide a strategy and migration path to integrate emerging technology applicable to the Joint C2 system**



Rapidly deliver C2 capability to the field

Command & Control Capabilities





Global Command and Control System – Joint

Joint Command and Control Program that provides secure Information processing and decision support to the Unified Commands. Provides Force projection and planning capabilities through
the Joint Operational Planning and Execution System (JOPES), Force readiness analysis through the Status of Readiness and Training
System (SORTS), and Situational awareness and C2 intelligence
support through the GCCS-J Global capability consisting of the Common Operating Picture (COP) and Integrated Imagery and Intelligence (I3).

Joint Planning and Execution Services

JPES is responsible for developing a set of collaborative planning and execution tools that facilitate, by using personnel and net enabled planning and execution technology in a collaborative environment, the development and maintenance of "living plans", and the rapid and dynamic transition to execution of war plans.

Note: Starting in FY12, SORTS sustainment is no longer funded by DISA. Sustainment funding will be provided by USD(P&R) until the Defense Readiness Reporting System replaces SORTS.

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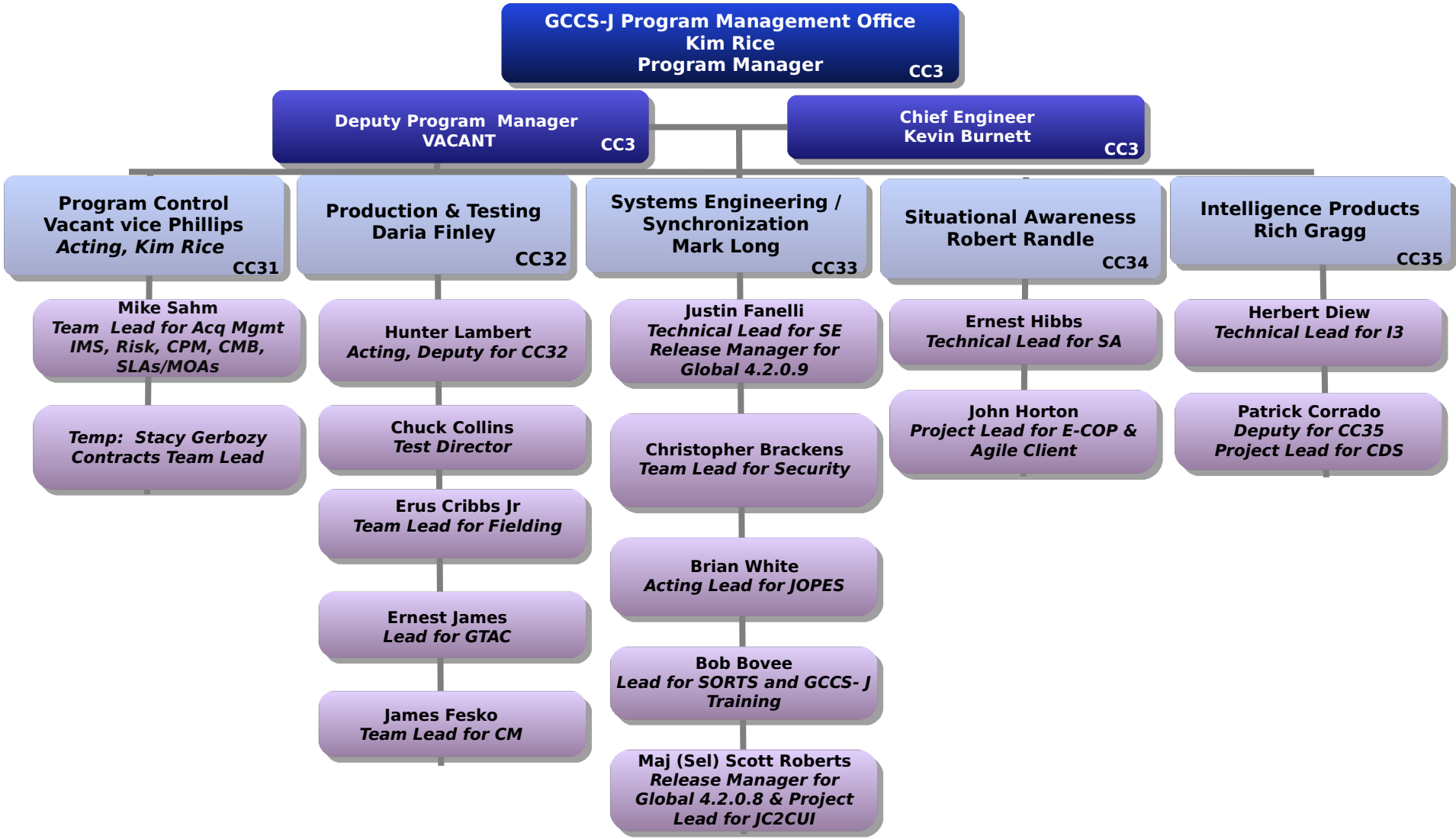
What is C2?

- **Command and Control: The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called C2. (JP 1-02. SOURCE: JP 1)**
- **Net-centricity is an enabler of better operational command and control**
- **Characteristics of net-centric C2 include:**
  - **Collaborative Decision Making**
  - **Tailored Situational Awareness through the User Defined (vice developer defined) Operational Pictures**
  - **Dynamic Community of Interest (COI) Creation Across the Range of Mission Partners (Military Services, Combatant Commands, Defense Agencies, Other Federal Agencies, State/Local Agencies, Non-Governmen**



As of 22 June 11

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DISA C2 Efforts (PE50K)

	What	Why
GCCS-J	•Sustainment of operational baselines (Global, JOPES & SORTS) –Basic support (e.g. software licenses), fixes and limited enhancements to support critical ops –Support for Joint Staff and the combatant commands (JSSC) •Limited synchronization between GCCS-J and the FoS, external applications and critical interfaces	Established program, ACAT 1AC
JPES	•Development and sustainment of next generational adaptive planning applications	Priority per JROCM & expected DPG language
C2 Architecture & FoS Systems Engineering	•Compliance checks for authoritative data sources •Testing & Interoperability support of migration to objective architecture •Development of Joint C2 architecture & associated standards	Per NII direction

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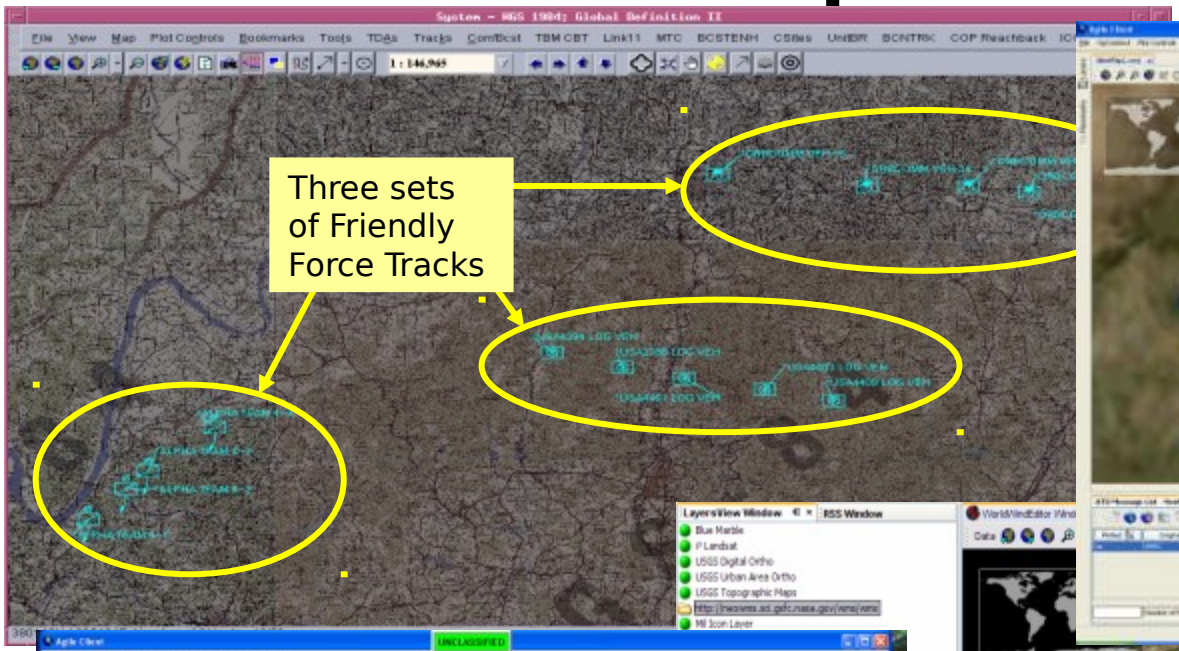
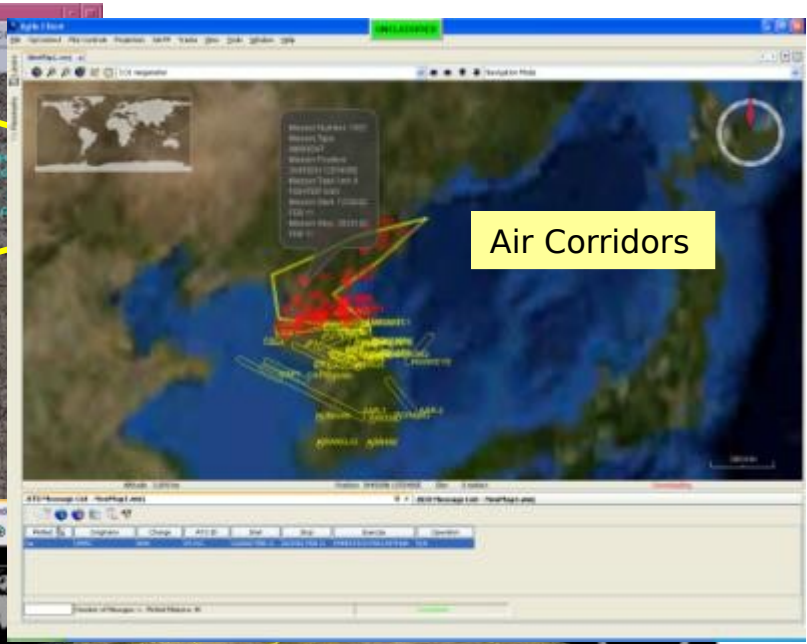
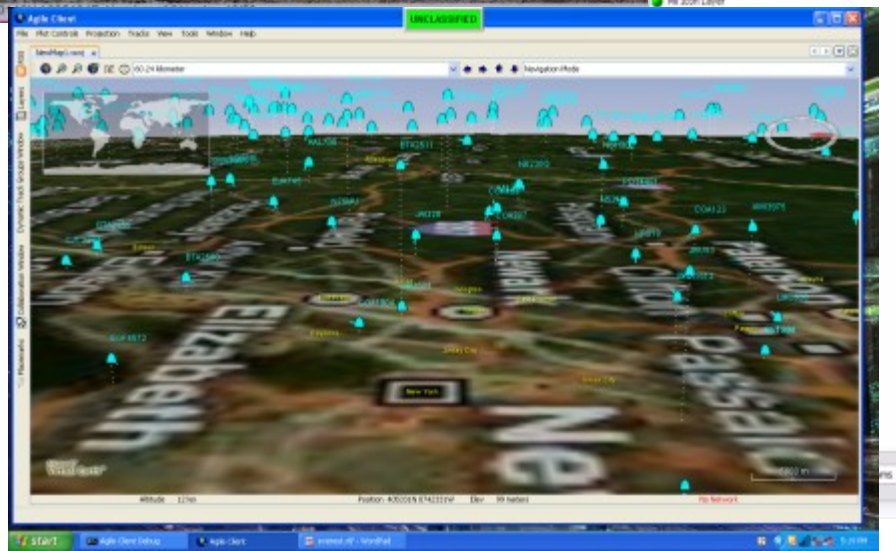
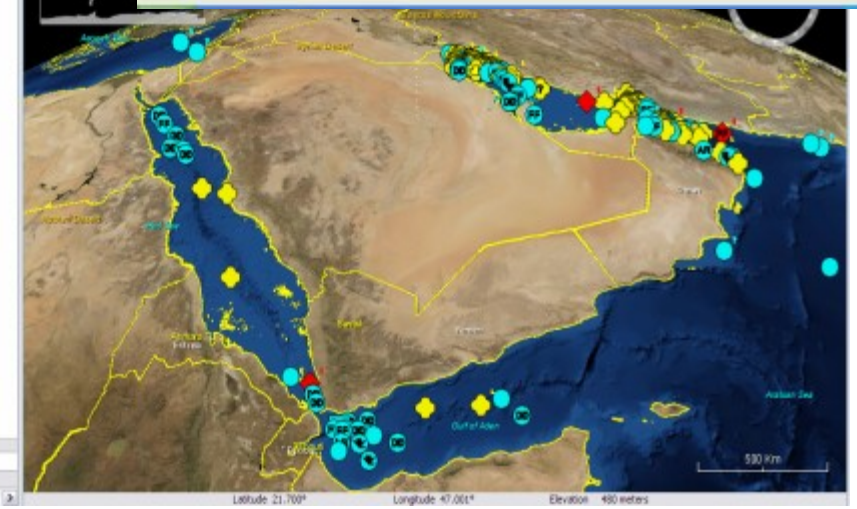
GCCS-J -- Global Situational Awareness

Battlespace Awareness – Track









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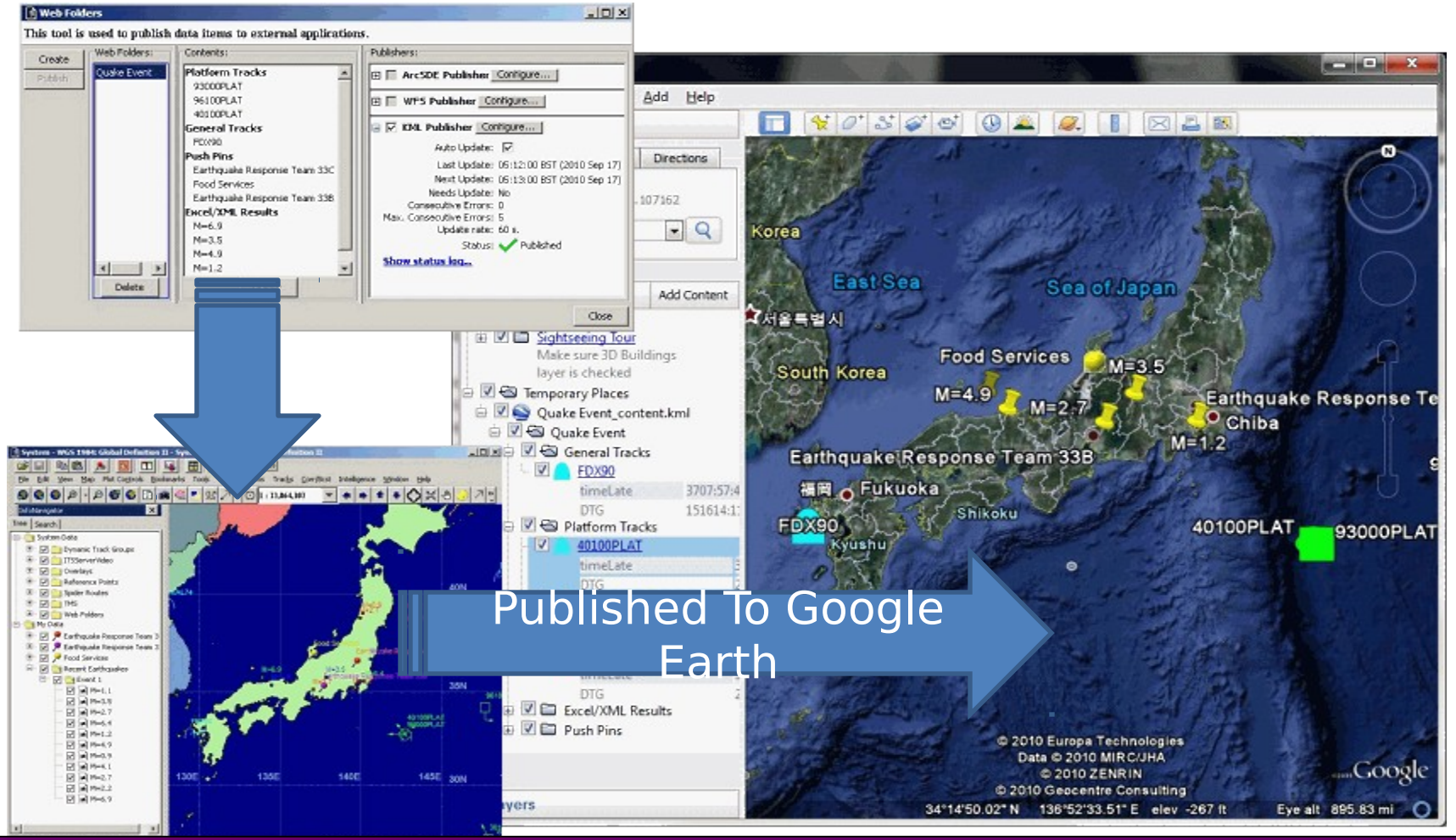
GCCS-J -- Global I³

Intelligence Preparation of the Battlefield



Example of how to take GCCS-J data or displays and publish to Google Earth, Powerpoint etc.